



# UNITED STATES PATENT AND TRADEMARK OFFICE

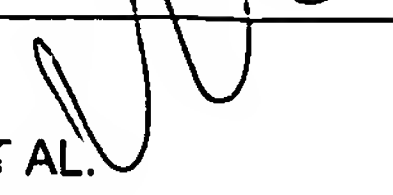
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

sw

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,780	01/12/2004	Robert J. Wentworth	BIP 0109 PUS	1779
27256	7590	08/27/2004	EXAMINER	
ARTZ & ARTZ, P.C. 28333 TELEGRAPH RD. SUITE 250 SOUTHFIELD, MI 48034			NGUYEN, DUNG V	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/707,780	<b>Applicant(s)</b> WENTWORTH ET AL. 	
	<b>Examiner</b> Dung V Nguyen	<b>Art Unit</b> 3723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11,13-19,22-31 and 33-47 is/are rejected.
- 7) ☒ Claim(s) 12,20,21 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/12/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6-10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Block (USPN 4,872,292). Block discloses a rotary finishing device comprising a general circular hub 126 having an inner periphery defining a through hole and an outer periphery, a plurality of slots 124 formed about the outer periphery of the general circular hub 126, each of the plurality of slots 124 being defined by a pair of side portions extending from the outer periphery, the plurality of slots 124 being generally uniformly spaced around the generally circular hub 126, at least one of the plurality of slots 124 having at least one finishing sheet 12 secured therein by an adhesive 118, wherein the pair of side portions extends generally inward from the outer periphery, wherein the generally circular hub includes a center line defining a reference axis that extends from the centerline to a point between the side portions and wherein the pair of side portions extends from the outer periphery in a direction generally parallel to the reference axis, wherein the pair of side portions from the outer periphery such that each of the plurality of slots 124 is generally rounded, wherein the adhesive 118 secures the finishing sheet 12 within the slot 124 by adhering it to each of the pair of side portions,

Art Unit: 3723

wherein each of the plurality of slots 124 includes at least one sheet of sandpaper 12 secured therein by an adhesive 118 (note Fig. 10, col. 6, lines 11-54).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, 15-18, 31, 37, 41, 43, 44, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block (USPN 4,872,292) in view of Wray et al (USPN 4,258,509). Block discloses the claimed invention as described above, however, Block does not disclose an end cap in communication with the general cylindrical hub such that a portion of the end cap is in communication with the general circular hub to effectuate driving thereof. Wray et al discloses an end cap 26 in communication with the generally cylindrical hub such that a portion of the end cap 26 is in communication with the generally circular hub to effectuate driving thereof (note Fig. 1 and 3, col. 3, lines 44-61). It would have been obvious to one having ordinary skill in the art at the time the invention was made of use the end cap disclosed by Wray et al with the rotary finishing device of Block in order to secure the finishing device for withstanding the high centrifugal forces during operation.

5. Claims 2-4, 22-24, 26-28 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block (USPN 4,872,292). Block discloses the claimed invention as described above, however, Block does not disclose the generally circular

Art Unit: 3723

hub formed of a metal material, constructed of aluminum or formed by extrusion process. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the hub of a metal material, constructed of aluminum or formed by extrusion process, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

6. Claims 5, 19, 25, 29, 30, 33-36, 42 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block (USPN 4,872,292). Block discloses the claimed invention as described above, however, Block does not disclose expressly that a plurality of slots being defined by a pair of side portions that extend generally outward from an outer periphery from the outer periphery of the generally circular hub in a direction not parallel to a reference line extending from the center line to a point between the pair of side portion. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to form a plurality of slots by a pair of side portions that extend outward from the outer periphery of the generally circular hub in a direction not parallel to a reference line extending from the center line to a point between the pair of side portions, because Applicant has not disclosed that a pair of side portions that extend from the outer periphery of the generally circular hub in a direction not parallel to a reference line extending from the center line to a point between the pair of side portions provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with

Art Unit: 3723

either a pair of side portions extend from the outer periphery of the generally circular hub in a direction parallel or not parallel to a reference line extending from the center line to a point between the pair of side portions because the plurality of slots perform the same function of securing the finishing media to the generally circular hub. Therefore, it would have been an obvious matter of design choice to modify Block to obtain the invention as specified in the claim.

***Allowable Subject Matter***

7. Claims 12, 20, 21, 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Saegusa et al, Hasegawa, Belanger, Emerson, Brinkmann Hoffheimer and Lundum are cited to show rotary finishing devices.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3723

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DVN  
August 24, 2004

  
**DUNG VAN NGUYEN**  
**PRIMARY EXAMINER**